You mustn't swim till you're six weeks old,
  Or your head will be sunk by your heels;
And summer gales and killer whales
  Are bad for baby seals.

Are bad for baby seals, dear rat,
  As bad as bad can be;
But splash and grow strong,
And you can't be wrong,
  Child of the Open Sea!

Rudyard Kipling

'SAILORMAN' 3.

November. '68.

KOTCHICK?Wolverstone
Marina.

Wolverstone,
Ipswich.

Late Again. Not reallyany excuse though if it's any concollation at least this time 'The Sailorman' is coming to you from an actual sailing Poly Cat moored, on this dark evening, and surrounded by a thick mist. Though we have only had a few weekends sailing, we have learnt a tremendous amount in this short period. Twice we ahve been aground; once while trying to pass John Leach on the leeward side when we went aground so quietly that we didn't even realise until John pulled ahead. We soon stopped laughing at our brilliance when we realised that we would have to sail Kotchick of during the night in a stretch of river that we had seen for the first time that day!

A part from this we have lost two boat hooks, been through a very uncomfortable 'race' when the dinghy broke loose, been out into the Harwich "pitching" ground where at one stage the bow plunged down ten feet cutting a wedge of water - and the shroud broke. We have discovered that the local Naval Training centre wont allow their cadets out in above a force three.

Well there are three Poly Cats afloat in this River and I daresay that there will soon be a large number afloat around the world. I think that once this is the case then we all have a right to make our opinions public and point out the advantages and disadvantages of our boats. Not just a right but a duty. Until I have done a lot more sailing on KOTCHICK (ORO) however I don't feel to keen on the idea of teeling others that they are talking through the backs of their heads.

Not until today where we were able to finalise a place for the meeting and this had greatly delayed the publication of the 'Sailorman'. Many apologies to all who have been inconvenienced by this particularly to those who might find themselves unable to attend as a result. Fortunately it will be held in the centre of town - Shaftsbury Hotel - where as well as being accesible you will also find a BAR.

Hope to see many of you then.

One thing that we have found while living on Kotchick during the winter is that our greatest problem is Condensation, with the COLD coming a close second. All our cooking and lighting comes from paraffin and this throws out its own amount in water. The 'galley hull' is the worst with the cabin top covered in water droplets. The cloths tend to develop a rathre lovely coloured mould. We are putting in two coal burning stoves approx ;I2 x I2 X I7 inches and we are prepared to sacrifice the space for the possibility of warmth and dryness.

Hoping that you will find yourselves on the water as quickly as we did,

IDEA's on Survival after capsize.

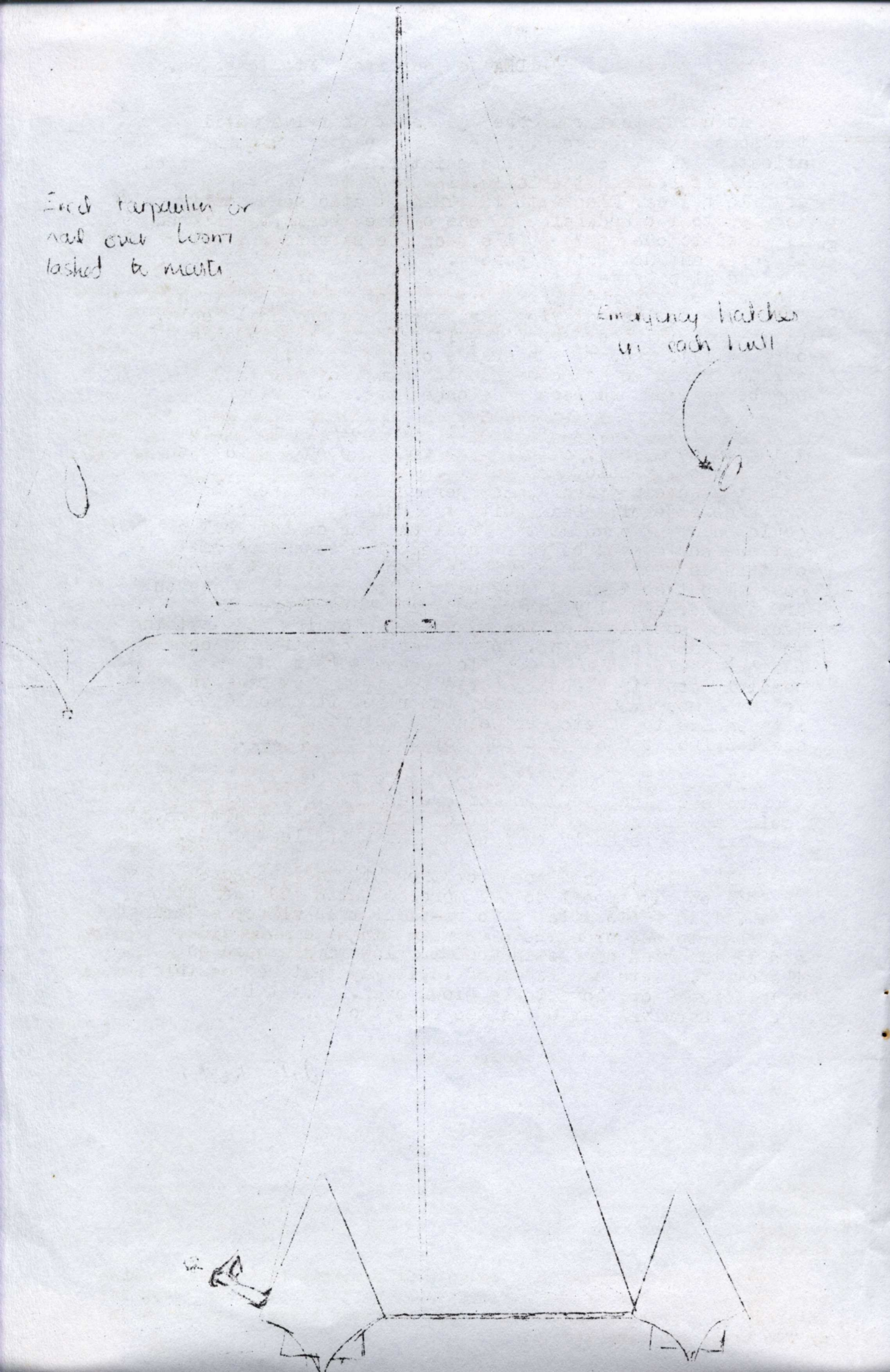
Assuming that you have managed to survive until the seas have subsided ... perhaps the dinghy remained afloat, still attached by its painter, and you have managed to pull it between the hulls, in order to give you a dry floor area. Then with the knife that is permanently secured to the underside of one of the beams, the shrouds attached to one of the hulls, can be severed ... being lanyards and not bottle screws. The masts can then be dragged also between the hulls and the other shroud/lanyards be severed. The masts can now be stepped into their prepositioned (for just such an emergency) heels. (this assuming they weren't bolted in the tabernacles originally)... on the underside of the beams; the shrouds taken to any convenient place; the sails may now be set and progress made once more...downwind.

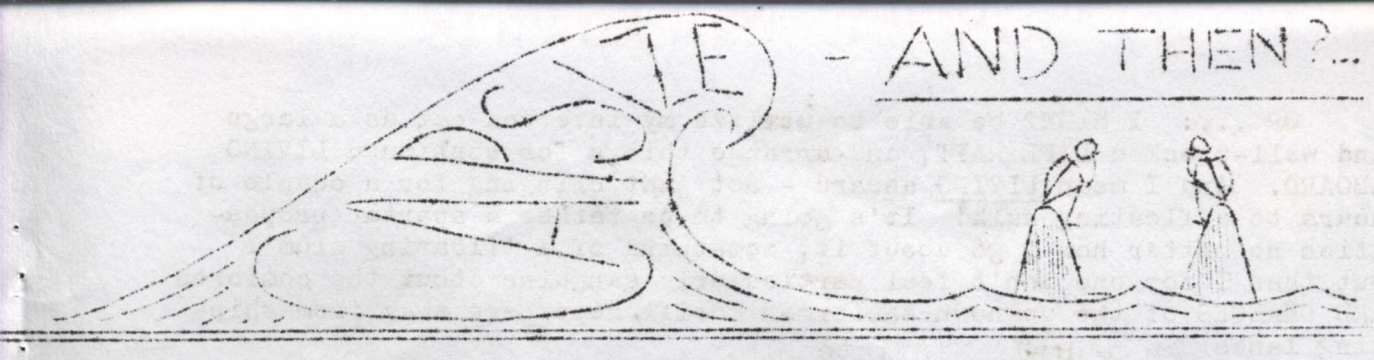
Finally ...and this will probably be the first thing to do anyway, you will, no doubt, open the hatches you have built into each hull on their inner sides with the screw driver, also permanently secured to the underside of a beam, with the knife. This hatch could be positioned at the front or rear of both hulls orthere could even be four hatches. The essential part of this is that there should be a completely watertight compartment so that no buoyancy is lost when the hatches are opened. Naturally inside you will have stored your emergency supplies of food, water, clothing and anything you may care to imagine. On the larger cats the space (Hatch) could be big enough to access within and possibly contain a bunk and bedding if the compartment is long enough. One seemingly important item would be a tarpaulin to stretch between the upturned hulls for shelter from the sun and collection of rainwater.

It may also be an idea to secure two sweeps beneath the hulls on long voyages for use as emergency tillers useful in either the inverted or more normal positions. The dinghy oars could be used as makeshift lee-boards.

All this is good food for thought and one more suggestion may appeal to the more athletic and energetic types. This is to attempt to re-right the hull by stepping the mast to one side, the crew weighting the same side, and IF the wind can be induced to blow hard enough on the other, sheets sheeted hard in, it may just be possible in a force 9 or above, to be blown over. .I think the former survival method is the best, though.

Dick Kirby


End tarpaulin or
sail over boom
lashed to mast
Emergency hatches
in each hull



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Maybe a CRUISING multihull capsize is something like winning the Irish Sweep. I couldn't say. I haven't got the figures and so what I think is quite irrelevant. I won't even hazard an impressionist guess - the odds must vary a great deal with design and a lot of other things.

Anyway, I haven't much to say about capsizing as such. I simply accept it for the time being as a POSSIBLE eventuality. Possible enough to warrant some serious thought - and FORETHOUGHT. Of course, whether you go along with this or not is very much a matter of PERSONAL choice - some back the second favourite for a place, others are at ease with long shots.

Some multihull writers put cruising multihull capsizing on a par with cruising monohull sinking. Time and reliable statistics will tell. Still, sinkings wouldn't appear to be all that commonplace yet monohull sailors do prepare for such a contingency: so why not prepare for a multihull capsize?!

Left to his own devices a Bill Howell is likely to keep his head and dive DOWN in order to come up beyond the 'lid' of the bridge deck. But will MY crew? will I? Unless DRILLED in the correct procedure (correct to the best of our knowledge at the time) we may 'instinctively' do just the wrong thing, and knock ourselves out in our trial-and--error groping. I for one tend towards thinking things out carefully, or, at other times, rashness. And so I'd rather do my thinking and my trying-and-erring right NOW. Then, if ever the need arises I'll at least have SOME sort of workable plan of action at my fingertips: no, not AT but right IN my fingertips.

How the ODDS against a wellfound cruising monohull going down compare with the ones against a wellfound cruising multihull going over I don't know, but between the two PREDICAMENTS there is, to my mind, one rather significant difference: where a sunk monohull means NO boat at all, an overturned multihull represents a DISABLED craft. How much disabled remains to be seen. And so, where sinking dictates the ONE and ONLY possible course of action, a multihull capsize would seem to offer ALTERNATIVES. Such a cafeteria situation is not an unmixed blessing unless one has prepared beforehand to choose well!

So when my cruising cat turns turtle I could take to my inflatable life raft (provided I've got one) in the well-tried traditional manner, and be no worse off than I would have been on sinking monohull. The raft must, of course, be ACCESSIBLY stowed, accessible from BOTH sides! This is not the time for frogman stuff.

/OR ...

*****

Some of the ideas put foreward here have crystallized over a period through correspondence with others. Without going through a sizable pile of letters and notes I cannot tell who first came up with what, and so the best I can do here is to acknowledge the contributions made by those others whom I shall leave nameless for the present since there has not been time to ask permission to publish their names.

Furthermore, I would like to make it explicit that I am speaking here NOT as a member of the A.Y.R.S. Multihull Safety Study Group but entirely as a private individual. So, whatever I say: let it be on my own head, and mine alone.

OR ...: I MIGHT be able to utilize my inverted cat as a large and well-stocked LIFE RAFT, and arrange things for continued LIVING ABOARD. And I mean LIVING aboard - not just clinging for a couple of hours to a floating hulk! It's going to be rather a spartan proposition no matter how I go about it, something of a 'floating slum'. But then I for one don't feel particularly sanguine about the comforts AND CHANCES of the unknown sailorman adrift somewhere away from shipping lanes in a small inflateable.

What I've found so striking in a number of reports in my files: the capsized craft would seem to REMAIN AFLOAT for quite some time but when finally spotted may be MINUS HER CREW! What happens to them? Are they seriously incapacitated when their craft goes over? knocked out cold? None of the accounts I've read supports such an assumption. The GOLDEN COCKEREL mishap, Hedley Nicol's experimental flip, the NIMBLE capsize in Table Bay, the BANDERSNATCH post mortem, Tom Corkill's close shave, ... In each instance cited the crew were - or appeared to be - not only alive and conscious after the accident but quite ABLEBODIED as well.

So whatever befalls them must happen some time LATER. If the JALAGANGA had turned up much later they'd very likely have found what H.M.A.S.SYDNEY found: another crewless derelict. Clinging to a slippery hump of bare hull, exposed to wet, cold, heat, no drinking water, no respite or rest, ... and so the crew get progressively weaker and number and more comatose, and finally just let go or are washed off their precarious perch. Prolongued exposure and with it growing exhaustion, physical and mental: that, I conjecture, is how those crews come to be lost.

Need this be so? I don't think so - and I won't accept it as 'just one of those things'! Survival at sea calls for more than just buoyancy. Can those other additional requirements be met on an inverted cruising cat? I think they could. And I certainly think it's worth a determined try.

Quite a few questions will have to be answered for this. HOW LONG will an upside-down cat REMAIN AFLOAT? HOW LONG will the structure HOLD TOGETHER if things are rough? - as they are likely to be. WHAT SORT of MOTION will she have? will her human crew be able to take it for long? HOW HIGH will she FLOAT? What's needed is a HABITABLE 'life support capsule or platform', not a waterlogged caisson! I must concede that the VAGABOND wreck (as shown in MODERN BOATING, August 1966) did NOT look at all encouraging - rather like a nine-tenths--submerged submarine. On the other hand, that'Golden Cockerel' post--capsize picture ....

Obviously these questions cannot be answered for multihulls AS A CLASS but only for each specific type. In the meantime I just have to ASSUME that a WELL-DESIGNED and SOUNDLY CONSTRUCTED multihull CAN BE MADE to stay afloat long enough and float high enough when capsized to be converted into an ADEQUATE life raft that will serve for EXTENDED PERIODS.

How??? Not being a designer I'm more concerned with adaptive behaviour than with fittings and other design features but these two aspects are pretty closely interwoven. So what about something 'from the horse's mouth' about the hardware part??...

Looking at cats, three approaches have so far occurred to me (and to some of those others to whom I am indebted):

(1) Emergency shelter by securing the canopied inflatable life raft between the two hulls.

(2) A canvas tent, or at least platform, slung like a hammock or trampcline above the waterline between the two inverted hulls.

(3) My special 'pet': accomodation INSIDE a hull (if not both) after making all normal hatches as watertight as can be, pumping her 'dry', and establishing ventilation and some sort of emergency hatch.

/Thinking ...

Thinking along these lines I venture to put forward FOR DISCUSSION a couple of suggestions:

(i) Provision of attachment points on hulls and underside of the bridge structure.

(ii) Pumps arranged to permit pumping out in either position: right way up or inverted.

(iii) Stowage and water tanks to allow access when upside down - and such as to forestall being knocked out or holed by an avalanche of weighty objects.

(iv) Hatches that can be made really watertight. What about CIRCULAR ones with neoprene sealing gaskets? And how about an emergency hatch?

(v) And how about a jury rig - with the ?crazy idea at the back of my mind of possibly turning my inverted cat into a kind of KONTIKI raft???...

I'd rather not elaborate on the last item. James Wharram's blood pressure may be already pretty high by now. He may be muttering - I don't know if he'd merely MUTTER -: "The man's a b... fool! If he's even thinking in terms of something like a'Narai' or 'Oro' in cruising trim capsizing, he ought to stick to his bathtub - and even that's too much water for the likes of him!..."

Of course, I don't expect to capsize. Who does??! And I don't intend to crouch in a sealed-off hull every time there's a bit of a blow - clad in a wet suit, clutching an aqualung. With all REASONABLE preparations made there's no need for 'capsize neurosis'. I'm actually rather keen to capsize - EXPERIMENTALLY. But I'd rather not enlarge on this notion: when the time comes I mightn't be all that scientifically-minded to allow a ruddy big crane to turn over the apple of my eye and sum total of my worldly goods!

So far I have made no mention of RIGHTING MANOEUVRES. For one thing I don't see in them an INITIAL ALTERNATIVE. The conditions under which a capsize is most likely to occur when voyaging are, I think, unlikely to permit any immediate righting attempts. For another, I'm not optimistic about the chances of righting a sizable cruising cat without outside help. Still, who knows?... - so here are some speculations to prompt some really juicy letters to the Editor.

Recipe for righting POLYCAT: unfasten both hulls; with most of the weight under the floorboards and bunks each hull MIGHT then right itself; reconnect the two hulls. Suggested venue: the lily pond in Kew Gardens, - and craft: an inch-to-the-foot scale model. With a full-sized polycat in midocean - well, THEORETICALLY it's not impossible. With the right crew, and very favourable weather conditions, perhaps such equipment as a couple of aqualungs or schnorkels, and wet suits in not-so-warm waters ... Quite a procession of ifs, isn't it?! With something like a HINA such a scheme doesn't look all that hare-brained and armchaired, but with a fully-grown ORO ...??? Me, I'd rather take my chances with that KONTIKI idea.

I SUGGEST then that an offshore capsize NEED NOT BE THE END of a multihull voyage, nor promt outside help the ONLY hope left to the capsized multihull sailor.

Over to you now. I've stuck my neck out far enough. Come and try out your axes.

SOUTH AFRICA. Peter Shreve.

In case some people feel that what they would like to say to me is unprintable, here's my address:

10 Sandhurst, 57 Olivia Road, Berea, JOHANNESBURG, SOUTH AFRICA.

The idea of a Poly-cat Burgee seems acceptable to a number of association members and the kind of emblem most called for is the Polynesian Catamaran Eye Symbol. Final decisions on colour, shape etc can be left until the Meeting in January, by which time I hope to have aquired at least one price quote.

Alan Stanier has ideas on PAINT:

His brother-in-law uses Dulux household paint - but he re-paints every year - and he finds it very satisfactory. I am told by a small boat-builder that paints in general consist of three prinsipal ingredients, and that it is their relative proportions which determines the type of paint - such as household, Yacht, etc. This man used Dulux on his house - lasted three years. Then he used International Yacht paint - lasted six years. But adecorator told me that Hadrian paint lasts ten years on houses.

International Paints limited, Yacht Dept. Grosvener Gardens House, London S.W.I. publish leaflets on paint including "Hints on boat Painting", apparently available on request. This seems a good booklet. Perhaps a london member could call at International Paints and get further information for th Sailorman.

FIBRE)GLASS....

The boat builder mentioned above also gave me his opinion that water-tight coverings such as fibre-glass, Polyurethane and Tar are fine provided they are perfect - no openings left, no scratches aquired If there are any openings water gets behind and rot trouble sets in.

Further it seemed to me thatconditions of humidity and surface preparation have to be just right (for fibre-glass and Polyurethane) so that an amateur can easily be wrong from the start, Even though Internatinal paints recommend Polyurethane for rigid glued boats, I intend to use "ordinary" yacht paint. I am also told that the cost of Marine Paint is not so very much more than Household, though have not looked into it. Ask for Discount.

In place of fibre-glass on my Mina, I intend to glue one inch by ½ inch runners to the bottom keel board (Oak on Pirana pine) and paint all over. The runners will be expendable, and having no nails can be planed down in due course for replacement to be glued on.

For holding the runners while the glue sets, a number of small sand bags might be convenient, on the curved bottom of the keel.

And a comment on the start of the SINGLE HANDED TRANS ATLANTIC.....

We went out to watch the start of the Trans-Atlantic Race, motoring down the River Tamar in "Mirosa", built in 1898 at Lowestoft as a sailing lifeboat for the R.N.L.I. There was very little wind, and some of the small boat spectators had not even taken their sails. In the distance, we saw the French Topsail Schooners "La Belle Poule" and "L'Etoile" making about one knot under full sail. A woman spectator was puzzeled; "But how does one man manage all that?"

The race organisation was good and we got near the breakwater by starting time. The competitors moved slowly out, some rowing. Many aircraft circled and a Shackelton swept over the fleet several times at about mast height. Only the large numbers on the competitors sails distinguished them readily from the spectators.

Alex Carozzo's Cat "San Georgio", 53', Looked huge Her large deck cabin has two seperate doorways into the bigcockpit. Jims 52' TEHINI, with no deck cabin will look vast.

.....

As the subject of Paint has been brought up it would serve to mention at this point, that We have had a letter of RIPOLIN Paint Manufacturers who say

..... We thank you for your letter and in reply have to advise you that we will be pleased to extend our Discount terms of 33 1/3 rd % to members of your Association. Perhaps you would be kind enough to advise your members accordingly. All they need to do is to write and say that they are members of your association."

Ripolin also added . ." Polyurethane enamels are available and have the property of great hardness and resistance to abraision. These properties can be a serious disadvantage on boats where timbers are continually flexing, and re-coating over such materials requires careful preparation.

We would suggest that these subjects are highly technical and that choice of paint must be related to the surface to be painted and its structure; and also to the use and maintenance of the boat."

This paint can only be bought directly from the manufacturers either by fetching it yourself or by asking for it to be delivered. In our experience the delivery service is extreemly good whatever the size of the order; also there are factories in most countries.

We have used their paints throughout "Kotchick" and found them very satisfactory (Also they dry quickly)

The address to write to is

RIPOLIN Ltd.
Balfour Rd,
SOUTHALL. MIDDX.

TEL: 01 574 4353.

.....

Polycat news from CANADA.

NOTE. Prior to 1968 Pat McGrath of Toronto, was operating a Trimaran plan service in Canada. Feeling that Polycats answered his requirements further. he negotiated the agency for Canada with J. W. and on Jan. 2nd 1968, under the new name "Canadian Multihull Services", commenced promotion of Polycats along with his existing lines of Trimarans.

"As far as we know, no Polycat were built in Canada prior to 1968. Since we obtained the franchise to distribute Jim's Cat plans, we have sold two ORO'S, two TANGAROA 'S, three TANE'S, and three HUNA'S. Contact with all the purchases of plans has not been followed up yet, however two Polycats in the immediate area are well under construction, and should be in the water in the summer of 1969. These are ; -

i) A TANE, No 23. by Mr A. Slater
149 Lascelles Blvd, Toronto 12
ONTAIRIO.

ii) An ORO ,sail no 9: Mr, T. McCarty
4I Ro inglade dr ve
Eto ikoke,Ontario.

Ted Plans to leave for summer climes in OCT/NOV I969. He is currently installing the interior in the first hull,having completed and fibre-glassed both hulls in eleven weeks.He is building his ORO outside in his garden,and except for assistance withthe fibre-glassing , is working single handed He has retained the layout more or less as the plans show,but has changed the detail to provide a comfortable sailing home for two with separate accomodation for two pairs of paying guests. Ted purchased all his materials in bulk and did a detailed costing job on the construction. He expects to have the big boat in the water ,fully equiped ,for $ 6000.If he can achieve the price figure it will be a real break through as far as thehigh cost of sailing is concerned. He used ½" unsanded sheathing grade Fir ply for the hull planking; ¾" elsewhere. Stringers are No I construction grade Hemlock 3" x I" PAR.The hulls are fibregl ssed rahter heavily as Ted wants to reduce maintenance to the minimum and used one layer of 2 oz mat on the keel,overlapping the planking point by about 2".A second layer to the waterline,a layer of 36 oz Woven Roving to above half-way up the topsides and a final layer of I½ oz Veil over all,with three coats of resin over the top. This method requires overall sanding only once - at the end - and saves much miserable itchy sanding labour. Fibre-glas ing one hull is an easy days work for three men. The saving in cost of using ext. grade fir ply far outweighs the extra cost of the fibre-glas ing. Compared to using ⅜ mahogony marine ply the overall saving was around $ 900 or £340. For construction speed ted used a rented pneumatic staple gun and attached his planking using Aerolite glue and I⅛ " galvanised staples. Bronze ring nails were used at the corners of each piece of ply and brass screws were used for attaching the stringers to the frames,inner keel and stems. He strongly urges any would be oro builder to use two inch planks for the inner keel instead of one " as this gives much more bearing surface for glueing and screwing the planking at this critical point.

The progress of Teds ORO will be followed in detail in this column and any Polycat builders comments or questions or advice will be greatly appreciated.

Pat McGrath

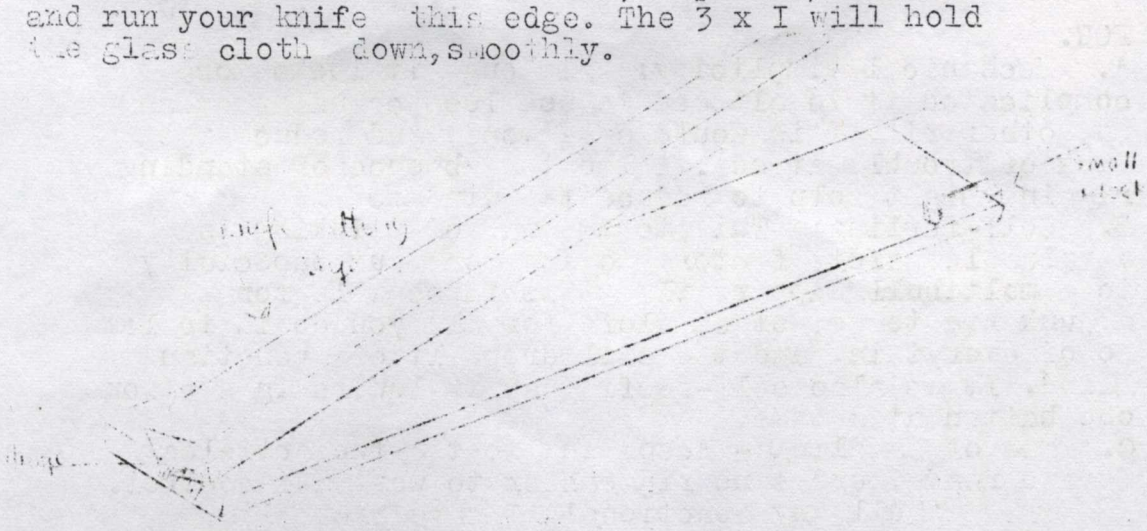
....

SHEARING YOUR HULLS WITH GLASS CLOTH.

After trying to cut glass cloth for my Tangaroa with scissors,rather unsucessfully I tried using a sharp knife. This was much better and to make it even more efficient I used a home made cutting board.

To make the board all you need is a plank of wood 3' 6" 6 x I and another 3' 6" 3 x I with a hinge on one end. Also nail a small block at one end to

steady the knife as you cut down. Then just slide the board underneath the cloth, drop the / x I down and run your knife this edge. The 3 x I will hold the glass cloth down, smoothly.



Letters to the Editor.

So far my only experience in boats has been two afternoons on the Trent in a Mirror Dinghy, as a rather nervous crew, and two weeks on the broads in a power cruiser. Thus my ideas and comments are virtually those of a layman.

It seems to me that this is the age of novelty in yachts. The Multihull idea has opened the door to all sorts of ideas and although the perfect yacht will probably never exist there is now such a wide choice available that most enthusiasts should find something near their ideal sort of boat.

Most readers of 'Sailorman' will obviously find a Polycat their ideal so I will take that for granted, but in the matter of sails and rig there seems to be quite a diversity of opinion. Even Mr. Wharram, who seems to be famous for his stormy views, recommends a wide variety of rigs on his range of designs.

I would like, therefore, to stick my oar into the water and add, not an opinion, as I am not qualified to base one yet, but an idea for the consideration of those who are better able to judge.

In the Yachting Press recently there have been a few articles and letters about Junk Rigs. What about a junk rigged catamaran? From what I have read the advantages and disadvantages are as follows
AGAINST.
A. Performance is about on a parr with a good gaff rig and setting of auxilliary sails such as genoes etc. spoils the basic simplicity of the rig. Obviously, therefore, it would not suit the speed enthusiasts, but to the cruising man this factor would not be so important.
B. The unstayed mast poses a severe problem when fitted to a Catmaran. A Trimaran or Monohull can have it stepped in the keel but not a cat. This is, I feel, chiefly a matter of engineering. Surely a suitably light and strong system of buttresses could be made out of an alloy.

FOR.
A. Mechanical simplicity:- although it looks more complicated it is alleged to use less chandlery than any other rig. This would save money and reduce the risk of trouble at sea. Also the absence of standing rigging might help to reduce the windage..
B. Self-furling:- This, to my way of thinking is a valuable safety factore to any boat but especially to a multihull. Apparently it is impossible for a junk rig to get stuck aloft for all you do is to let go of everything and the sail drops like a venetian blind. It is also self-reefing as it lowers in sections one batten at a time.
C. Ease of handling:- According to the two articles I have read there is no rig easier to work and control.

Well, any reactions! I have probably missed some points of importance. Perhaps some readers have tried it? If so I am sure we would all be glad to hear from them.

... ...

Mr Allan Brook, of Totnes, Devon, suggests we appoint a manufacturer for the metal bits for the more common designs. These would probably be cheaper and the quality better than getting local blacksmiths to do "one off" jobs.

This seems a good idea. Anyone willing to do a price hunt for best firm please get in touch. Ed.

Maj. F.J.Cowing of Barbados is going to carry out experiements with ferro concrete to see how it compares with ply for weight, strength and durability.

WARNING from RONGO.

With reference to Jim Andrews article "So what's wrong with Multihulls", (Practical Boat Owner, Dec), wherein he implies that all cats need to be sailed light to prevent nose diving and capsizing, this, most emphatically, does not apply to "Polynesian Catamaran Designs", which are specifically designed to carry a load which assists in windward work, tacking and gives stability. To increase the stated load will improve windward performance and stability in heavy weather. To reduce the load could lead to instability and poor tacking.

We cannot be responsible for the results on a Poly Cat Design if Jim Andrews advice on loading is followed. - Poly Cat Builders please take note.

James Wharram.

....

A Tragic Incident.

Every time my husband designed and built us a new catamaran I insisted on "no holes" in the boat (i.e. sink outlets, toilets, etc.,) and as small windows as possible.

I have just recieved an account form a countryman of mine, a German living in Italy, and now building one of our Naral Cats - of the tragic loss of his

former trimaran with the death of his best friend, due to a bi front window being smashed in.

I have transalated his description which might serve as a warning to people who love those big front windows on a deck cabin to "look at the scenery";

"We were four on board. It was blowing force 7 - 8. Leaving the river we had to cross about 500 yards of breaking seas . The mainsail was reefed down completely and with the storm gib up we did no more than IO knots.

The boat sailed well until, after a few hundred yards, a nine foot high waterwall advanced and broke the big front window of the trimaran. Though the boat still sailed perfectly, we did not consider it wise to carry on with water pouring in.

We turned and now had the breaking seas on the quarter. The boat started running before the seas much too fast and began to broach. One of the breaking seas got under the platform and turned the boat over. Nothing broke and the boat turned almost completely round finally lying on its side with the underneath of the deck facing the wind. So it ws quickly driven onto the shore.

Had I stayed on board I could have easily got the anchor down, but my friend and I were thrown into the water. To breath we let go of the boat a minute, which drifted away and smashed on the rocks. The other two, a man and his wife , were in the cabin when the boat capsized and so reached land on the boat. In spite of the breaking seas it was no problem for me to swim to the shore, but my friend was exhausted and held on to a buoy to rest.

When, after a short while, he did not come I swam back to him to see what had happened. My friend , being too exhausted, refused to leave the buoy, and I, being unable to undo the knot of the buoy-rope and thus tow him across, swam back to the shore to get a knife. When I returned my friend had gone.

....

How NOT to launch an ORO.

The huge Cat, now disrobed of all her centre decking etc. stood waiting for it's transport to arrive. The weather was good and we were all filled with anticipation at the thought of being on the water in three days time. In order to raise the hulls the necessary five feet into the air (so that the lorry could be driven underneath and the boat loaded onto the trailer) we had decided to build a scaffolding above each hull.

The operation was planned to be completed in one weekend, the removal of the two 46' hulls from Dunstable to Ipswich, on a 30' Vauxhall demonstration lorry that had been kindly loaned to us for that weekend, to be followed by the launching on the Monday.

At noon on Friday Sept, I3th, the scaffolding arrived and we busily assembled it. By 6p.m. we were all ready, the lines prepared round the hull with their complicated block and tackle system, and the lorry in exactly the right place to reverse under the first hull when she was hoisted up.

"Right said Fred; let's give a whirl" - we all heaved, the line stretched we groaned, puffed and swore -

but Kotchick sat quietly on the ground, not even deigning to sway slightly. Various systems were tried, all unsuccessfully, so finally we decided to lift her from under the bow and then the stern, taking in all the slack at the same time. We crawled underneath and heaved and at last the bow started up. The lines were hauled in and took the weight, the scaffolding swayed, and, amidst more groans, the stretching lines once more deposited the hull on the ground. The further she went up, the more the scaffolding gyrated, yet still we were nowhere near the height needed to get the lorry underneath. The time was 3a.m., and for that night we had to admit that we were beat.

Regretfully we went home.

The next day it rained. We doubled the scaffolding and also the blocks - putting a 5 - 1 purchase on each set. By four p.m. all was ready to try again and this time, using 4 A frames contained in an 18' x 40' bridge, straddling the boat, she was successfully raised and the lorry driven underneath her. Five hours later the scaffolding was down and we were at last ready for the road - or, at least, one hull was - ....24 hours late!

At dawn the next day we were rolling. At eight we were brought up short when the driver noticed that the fuel gage had not moved off full. We pulled onto the hard shoulder and peered into the tank - virtually empty - no small matter on a diesel engine which requires a lengthy priming process to be carried out by a skilled mechanic should you run out of fuel. We limped to the nearest town's petrol station nearly demolishing its canopy in the process having completely forgotten the 15' of bow we carried above us - and refuelled.

This hull nearly fell off twice on the way downbut this was small fry in comparison with what awaited us in Ipswich!

A At 3p.m. we arrived at the Marina, to be met by the Poly cat stalwarts who had waited, one throughout two days of rain, for our arrival.

At this point we decided to change the method of unloading in the vague hope that we might still get the other hull down on monday. This new method consisted of a scaffolding raft which would slide down vertical tubes, when the clamps were released. All went well until we got to about an inch below the height of the lorry bed so that there was no turning back. The clamps promptly jamed and the scaffolding took on an alarming list. Lines were put out with our "Stalwarts" on the ends and we went aloft to hammer the raft down. By 10.30 we had descended about 1' 6" and the list on the frame was really dangerous - and still it poured. There was nothing for it now but to quit for the night and pray that a wind did not pick up for this would undoubtedly have knocked the whole issue flat. The following morning we ordered a crane and by 11a.m. she was safely swung out of her potential coffin and placed gently on the ground.

The two of us that stayed then endured a week of living on half the Cat, on the Marina Car Park! Still we made the best of it by fencing her off with oil drums and planks, putting our clothes out to dry, and having milk delivered to the hatch.

Feeling that discretion was the better part of valour we ordered a crane for the unloading of the second hull and by dint of some great driving by our B.R.S. Driver and strenuous efforts by the rest of our crew, the two hulls were on the hard by 4.30 p.m. on Friday 20th. The crane then manoevered one hull whilst we got the main beams into position. The next morning saw feverish activity to get the decking down and the bulwarks up by noon when the tide was right for launching.

With lines here, there and everywhere to hold her from running away she was sucessfully rolled down the hard and eagerly took to her natural element.

Having tied up at our temporary mooring we took time off to look around us. Someone on board drew our attention to a black object drifting a few feet away from the boat. What on earth was it? Various mutterings then someone mentioned a SEAL. Everyone rushed up to look and unbelievable though it may seem, it was a baby seal. What an omen for us; after all, wasn't our boat called KOTCHICK - the newfoundland name for a young seal!

....

HOME MADE BEER.

For 2½ gallons:-
2 lb. Malt Extract.
2 ozs. Hops
2 lbs. sugar.
I½ desertspoonfuls of gravy browning.
3 teaspoonfuls of dried yeast.
I " citric acid
¾ - ½ level teaspoon. of salt.

Method.

Boil one gallon of water with hops and gravy browning for 35 minutes. Add I lb. sugar and 2 lb. of malt to hot mixture in suitable boiler or container and thoroughly mix; add rest of water (up to 2½ gallons). Temperature must be below 80 degrees; then add salt, citric acid and yeast.

Leave to ferment for 3 days, if poss above 60 degrees. Add I lb. of sugar and leave for another 7 days. This mixture can be drunk after syphoning, but the beer is improved by adding a little extra sugar to each bottle, and leaving for a further 7 days. Alternatively store the mixture in another container or large sealable receptacle. Remember to release a little pressure daily.

... .

Jim's Column.

When this edition of 'Sailorman' gets into your hands there will be approximately 400 'Polynesian Catamaran Builders' throughout the world. We represent a revolution in boat building and in sailing thought.

The first immediate task with our numbers is to hammer for recognition in the Yacht magazines for these are financed from two sources - advertisers and readers. Usually it is the big advertisers who have the greatest say as to what goes in Yachting columns. An example of this appeared in the June issue of 'Practical Boat Owner', when, in an article on single-hulled boats, catamarans and trimarans "Artificer" stated that Catamarans must be kept light and

and 'require special sailing techniques and concentration', 'for cruising minimum size is about 30' overall.' And finally that a monohull is cheaper than a catamaran for deep-sea sailing.

This is ceratinly untrue not only for our designs but also for Bill O'Briens Bob Cat design, and in fact this only applies to the designs like the Iroquois - a minority amongst catamarans - (Which, incidentally, have the biggest advertisements in the yacht magazines.)

The Editor of Practical Boat Owner refused to publish and refraction of Artificers statement; indeed later got a crack in that Trimarans were safer at sea than catamarans. A host of readers letters from our Poly Cat builders who had read the article would have forced the Editor to face facts and not be blinded by his advertisers.

One of our people referred to the growth of Big Brother recently; he ought to know as he works directly for Big Brother, Big Brother being the bureocratic state. A control of Yachting will come.

For instance, each year the R.N.L.I. loose money, largely due to yachtsmen. Sooner or later a control will be excercised over yachtsmen and every time a lifeboat is called out, that day is brought nearer.

To whom will the authorities turn, to set up, inspect and control yachting, for information on catamarans? The R.Y.A. Catamaran Committee. Who are the R.Y.A. Cat Comm.? They are the commercial designers their business associates and friends whose designs you have all examined and rejected to build a Poly Cat. The R.Y.A. committee is a 'ring' as sharp as any in the antique trade. Already they have framed the rules and regulations of the R.Y.A. Multihull rating rule for races, to keep the price of an entered multihull to high for the average builder. It works out at about £200 more to enter a boat in the Crystal Cup Race than in the Round Britain Race. Even if you enter the fact that your boat does not have a deck cabin will work against you on corrected time.

Members of the R.Y.A. Cat Comm. have used their influence to keep us out of yacht magazines and have tried to block the spread of our designs and ideas.

Can you imagine what would happen if they were in a position to excercise control over what type of multihull could sail offshore?

The 'Polynesian Catamaran Association' has to be recognized as an international body able to speak as an authority on the majority of

sea going catamarans in the world. Amongst our members we have more varied multihull sailing experience ,(not just on Poly Cats) than any other body in the world. We have a very wide cross section of engineering, scientific and medical skills, allied with heaps of practical common sense.

It has been suggested recently that the Sailorman should be expanded, printed on better paper ,with photos included,(personally,I like its rough,gossipy style),for apart from the A.Y.R.S. leaflets which are excellent, - and which 'The Sailorman' never hopes or wishes to replace,- ther are no good catamaran magazines on the market. There is a multihull magazine, but it consists chiefly of advertisements,or articles that back up the advertisers! Nor will the Editor ever print anything that deals with the tough facts of a multihull world - whose cat capsized?- whose split?- what is actually going on behind the scenes? Once again ,its another magazine in the grip of the big advertisers. The developement of the 'Sailorman' is a matter for the Poly Cat Assoc. to discuss.

Time is running out . The time when a man could build a boat and sail the seas without interfearence will pass. When 'control' comes are we going to be in the position to control ourselves by virtue of our status and being a well known body or will a hostile body like the R.Y.A. Cat Comm. be speaking for us.?

....

The Lone Sailor. J. Norwood.

If this yacht holds together,I'll get there.
If she'll make to weather,I'll get there.
When the seas become enormous and the winds decide
to storm us,
"Stick together", they inform us,I'll get there.

If the mast will keep upstanding,I'll get there.
And stays don't start astranding, - I'll get there.
I would be a sluggish rover if the blooming mast went over
There isn't any other I'll get there.

If she'd only stop her pounding,I'll get there
And ease up on her bonding I'll get there
It is just this corkscrew motion in the muddy patch
of ocean.
Which makes me loose my potion;I'll get there.
NOT CAT SAILORS:
If she doesn't flip right over I'll get there.
And the hulls don't leave each other,I'll get there
Now this wagons really shifting,the weather hulls
just lifting,
It's better than just drifting,I'll get there.

If the wind would blow a little I'd get there.
I'll boil another kettle. I'll get there.
I've discovered now what matters - you don't move
when it's flatters
And everything goes flatters.I'll get there

If I can stand the cooking ,I'll get the e.
It's just a bit black looking,I'll get there.
Those tins I got from Mabels have now lost all
their labels
There's jam on all the tables.I'll get there.

The trip has nearly ended.I'll get there
My bruise is nearly mended,I'll get there
I'll meet the lads and lasses;we'll fill up all
our glasses
And sing till darkness passes.Then I'm there.

... .

When the Waters Move.

Water has seriously effected my life and I have never doubted the biologists and marinologists who tell us that we are part of the Sea. My earliest affectation came at school with the biblical story of the sick carried down for a cure 'when the waters moved'.Thus the title of this article ,the motivation of my life and philosophy and my reason for writing.

You don't have to believe this.Another version would recall the pangs of unrequited love because I didn't,of all things,pour a jug of water over the girl concered. But life's like that.

To satisfy you of my bona fide - I cannot satisfy myself - I must insist that forsaking wordly pleasures I sweated for the perfect boat had all things reddy for an extended trip, and then swapped that worthy craft for a heap of old iron (Dutch) in which I now write before the glowing stove - another heap of scrap - and didn't go.

Don't ask me why Human chemistry is too complicated for some analysis. There are always others to take up the challenge and to them is due some patronage 'for if a clodde breaks from the maine , is not England the lesse?' (apologies to the ancient poets).

I am unfortunate professionally (teacher) that I doubt the worth of teaching - only learning having relevance as a complicated internal organisation of experience. We take from life and from others that which we need,to classify and interpret,and it is then our own knowledge that allows us to act.

So,if I say to the would-be wanderer
Reef in time or
Calamity only comes from a series of errors or
Decks on boats are sissy or
Move slowly or
The best way home is to go round the World (G.K.C.) or
Expect the worst and go for the best or
Don't be frightened of fear or

[illegible]
Land is dangerous or
If you don't know what to do, do nothing or
Praise and sympathy are useless commodities or
Turn your head when talking or
There's a time to plan and a time to throw everything to the wind or
Make up your mind and stick to it, wholeheartedly or
Trust your ship and your compass,
each individual will take from each statement concious and subconcious shades of meaning (rejection produces the opposing slavery).

I see the integration of the individual proceeding from
(i) the initial confusion of confused experiences (too much happeing at once) to
(ii) Careful planning and the imagining of situations to come , to
(Iii) Subconcious acceptance so that the concious mind is free and open - the senses working automatically.

What more? We strive, each for his own goal, the long, long search for a lost horizon dim in the future (or is it the past?). We move alone albeit the patterns of others crisscross in their complexity drawing us on, one moment consoling, the next challenging.

I have found that when men are thrown together in lonesome placeson earth, there comes, after the inevitable pause, the inevitable question, 'What are we doing here?' It is not customary to answer. Perhaps it is a life well-spent if we do but ask a few of the questions. Here is one.

On the Eastern Seaboard of the United States there lies a Neolithic temple unexplained. May you like Odysseus, find your oracle. I cal down the ancient gods to go with you, your masts your fudders and your anchor.

> 'I do not believe in a fate that falls on men however they act, but in a fate that falls on them unless they act.' (G.K.C.)

P R Paulain
"Nana Christina"
Nov 68

MULTIHULL ACCIDENT SURVEY and SAFETY STUDY PROJECT

Of the misfortunes that may befall multihull sailors many will be of kinds common to ALL small craft - something that appears to be overlooked by some who would seem to accept monohull accidents as 'one of those things' but sound as if they see in just about every multihull mishap or drama 'PROOF' of the "INHERENT unseaworthiness" of anything that has more than one hull. Some are specifically multihull problems - not necessarily 'better or worse' than their monohull equivalent but quite likely somewhat DIFFERENT - and should be calmly and carefully studied as such.

Where monohull design and seamanship have many years of accumulated knowledge to draw on, the MODERN multihull craft as we know it has come of age but recently, and we feel that much is to be gained by pooling ALL the experience, skill, and ideas we can mobilize, and systematically piece together a full picture of likely multihull safety possibilities and problems. Not in five or ten years' time but NOW. Let us have debate and controversy by all means but let us try to put ALL the cards in the pack ON THE TABLE, without fear or favour, in full view of all concerned.

As a special project team of the AMATEUR YACHT RESEARCH SOCIETY we have therefore embarked upon a COMPREHENSIVE STUDY of MULTIHULL SAFETY with particular reference to CAPSIZING.

A number of specialists in pertinent fields have already consented to act as consultants and technical advisers, and to assist by making available special equipment and facilities, and we have taken great care to ensure that the execution of this OBJECTIVE study shall be sound. As a research group we have no wish to enter the ring of multihull polemics and shall confine ourselves to chronicling ALL the available data relating to multihull SAFETY. Whenever we venture to draw conclusions in our reports we shall endeavour to cite not only evidence which appears to support them but also point out that which casts doubt upon our interpretation: ALL the cards ON THE TABLE! And we shall be receptive to responsible criticism at all times.

With YOUR help this project will BRING TOGETHER a wealth of material, at present widely scattered or unpublished, in an easily accessible SOURCE of RELIABLE DATA and set up a similar OPEN SHOWCASE of fertile and sound ideas which may do much for multihull cruising, and will, we hope, play a part in REDUCING AVOIDABLE LOSS of LIVES.

Our appeal is for FACTUAL INFORMATION relating to offshore multihull mishaps and disasters, for COMMENTS and SUGGESTIONS - and for ASSISTANCE of ANY KIND.

(1) Whenever and wherever an offshore multihull - ANY offshore multihull - meets with a serious or potentially serious accident we would like to know of it. Particularly if it is a CAPSIZE, though we are equally interested in such contingencies as man overboard, fire, and appreciable structural damage through strain, collision, grounding, or action of wind and sea.

We would like to know in detail, and from as many different sources as possible, WHAT HAPPENED to which type of craft UNDER WHAT CONDITIONS. To whom, when, and where?: so we may identify each EVENT in correlating the data accumulated.

What measures were taken? How did crew and craft fare during AND AFTER the accident?

We would also like to know the history of any information volunteered: whether coming directly from a participant or eye witness, or via verbal or written reports.

(2) In addition to factual reports and items of information we would welcome ANY comments and suggestions that may have a bearing on multihull sailing, building, or design - or safety at sea generally.

We would rather come to regret having invited more than we bargained for than overlook one promising approach. The demands the sea makes upon the sailor of small craft cannot be altered - but new ways of looking at the problems posed MAY lead to new solutions.

Nor need ideas be 'original': if something quite commonplace turns up time and again in our mail we will know that here is something widely thought about.

(3) We are also inviting accounts of situations which MIGHT have led to an accident but did not, and would like to hear about any measures or design features that are thought to have prevented a mishap or averted disaster.

And we would be most interested in reports concerning crews and craft with a reputation for 'troublefree sailing'!

(4) Since we see this project as but one step in the right direction and part of a much larger theme, we intend to cover not only the currently ascertainable facts of multihull accidents and counter-moves, and promising ideas and suggestions, but also to SUMMARIZE what is known of the essential requirements for HUMAN SURVIVAL at SEA.

We are therefore keen to communicate with anyone who has had personal experience of SURVIVAL UNDER EXTREME (or just 'unusual') CONDITIONS: at sea - or on land. Or anyone concerned with such matters who may be able to supplement or guide our own systematic study of the already discouragingly vast literature on this subject.

We would thus greatly appreciate ANY help YOU may be able to give this research project - by contributing information, ideas, suggestions, by directing us to any likely sources of such material (new or old - we think that there may be a substantial body of multihull lore that is just not widely known in our times), or by passing on our appeal to others who may be able to help.

Whether you have a single item of information, or a 'tip-off', or are prepared to join in as a correspondent covering a geographical area, a special field of knowledge, or a publication of which you are a regular reader - or just tell us: "Good show!", or "Nuts!" - your contribution will be welcome.

The information gathered will be PUBLISHED in a form that will, we hope, make it both IMMEDIATELY USEFUL to the PRACTICAL MULTIHULL SAILOR and of value to the BUILDER. And experimenter - we aren't ignoring designers here: it's just that we don't want to sound presumptious; let's first see what we come up with!

To achieve this end we NEED ALL THE HELP WE CAN GET. At the last count the number of Polycat builders and sailors had gone well past the two hundred mark. A community of multihull enthusiasts 'blanketing' the globe. With YOUR help this enterprise could gain eyes and ears - and heads! - in every part of the world. A WORLDWIDE NETWORK of lookouts and correspondents.

With so large a net we stand a very good chance of catching enough fish to come up with something to benefit ALL of US.

"US"? Yes. Two members of this research team are building Polycats: a MAUI and an ORO.

A.Y.R.S. MULTIHULL SAFETY STUDY GROUP.

Peter Shreve,
P.O.Box 17117,
Hillbrow,
JOHANNESBURG,
South Africa.

Peter Steward,
63 Burke Road,
IPSWICH,
Suffolk,
England.

The Building of NGATAKI.

NGATAKI is a 34' Tangaroa Catamaran which I have built by myself, in eighteen months spare time work. It should be sailing for less than £500. I built it in a friends back garden, adjoining the River Orwell. So near, in fact, that a good spring tide used to flood the garden and wet all my materials. The only cover I had was a polythene "Poli-Tarp- 33' x 12', which was a godsend. No electrical power or light was used once the hulls were erected, each hull taking about 6 monthsto construct. I used cheap pine for the framework and Douglas fir exterior ply, fastened entirely with square galvanised nails and aerolite glue. The decks were covered with ruberoid mastic and roofing felt. This has proved 100% waterproof and entirely satisfactory.

The starboard hull I sheathed to the waterline with Calico cloth and Aerolux resin. This method costs more than fibre-glass (which I used on the port hull) and is not so good as it is covered in hair cracks and has started to come away at the waterline. I made all the metal fittings myself, mainly from G.P.O. materials which I got from the scrap-yard, using 5/8th bolts for the main beams. The G.P.O. use them to go through the top of the telegragh poles. They are eleven inches long, threaded both ends and galvanised to government specifications!

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The Launching Of NGATAKI.

This was a problem as each hull had to be lifted three feet to clear a wall, then lowered seven feet onto the shore and assembled before the tide came up. This was accomplished by laying each hull on its side and lifting it by means of short lengths of scaffold tube, onto the wall. We used two 3" x 12" planks 29' long coupled with the help of about 30 people, several of whom were polycat builders. The hulls went over allright and no damage resulted Once on the shore it was quite a simple matter to juggle the two hulls together so that the two centre beams could be fitted. Meanwhile everybody and everything was becoming covered in mud. There were, however, no complaints from my band of helpers.

The rubber for the suspension was cut from an old conveyor belt which I bought from a ballast pit for 5/-. It'S quite hard work cuting reinforced rubber and takes two people, one with a hacksaw and the other pulling the rubber with a tearing motion to prevent the hacksaw from jamming.

We managed to get all four beams on before the tide came in. It was dark by then so there were many torches in the bilges to see if the cat leaked. I was relived when she didn't. My woodworking skill was even better than I had hoped for.

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The Sailing of NGATAKI.

I have never sailed in a large multihull before so I can only compare it with similar sized

onohulls I have sailed. I was a bit wary when I first held the living tiller but my confidence quickly returned when I found how respon ive the craft was. Fingertip pressure was all that was required to keep her on course. With my rig there is slight weather helm, just enough to make the Cat round up into the wind when the helm is left. This is a good safety feature in case the helmsman falls overboard, for the boat will not run away from him out of control.

Windward ability is comparable with any other craft I have been on except in very light airs when she seems to make more leeway. This is nothing to worry about, as I draw less than two feet and can make longer tacks right inshore whereas a keelboat is restricted to the channel.

NGATAKI tacks satisfactorily with only gib and mizzen in strong winds and is still perfectly balanced. The roughest conditions I have so far encountered was a force 6 easterly wind with waves about 7' high and very steep. We were on a broad reach just under jib and mizzen. I don't know how fast she was going but we were certainly taking a buffeting. The boat was quite dry except for a little spray that came over the bows and through the decking. However as we stood on top of the hulls we never even got our feet wet. The fastest speed so far achieved is about I2 knots. Every time I go out it is either too calm or too rough to do any speed trials. Sometimes it's just like going along in a car watching the river banks flashing past. I haven't noticed any tendancy to lift a hull even when caught by a squall. Instead the lee hull is pressed downwards, and inside the cabin one can see the water flashing past the windows.

Now for the subject of changing tacks - a subject rarely spoken about in multihull circles. Every time a tack is made in any boat it is a completely different experience, nobody can say what will happen. I have studied Jim's writing on the proper way to do it but even that's not I00% especially in rough water. The surest way to do it is to back the jib and the mizzen. Then the Cat will practically turn on its own axis.

However, I tried to come about three times once in rough water and each time the waves stopped the boat in its tracks. In the end we had to gybe round as we were rapidly being blown onto the shore. I could have made stern-board but then there is terrific strain put on the rudder in rough waters. The ve d hulls have great directional stability, the Cat just wants to keep going straight. When tacking in strong winds one has to really heave on the tiller to overcome the water pressure, than the water boils as the cat seems to skid around just like a fast car.

It's pretty lonely sailing on the River Orwell now it's December. All the mon hull sailors seem scared to come out in the cold.

The only other sail to be seen on the river belongs to KOTCHICK another Wharram Cat. Us polycat sailors must be tough!

NOTE.
I am prepared to take interested parties out on day charters for a modest fee. Please write for further details to :- John Leach, 104.Montgomery Rd.
Ipswich.SUFFOLK.

P.C.A. ANNUAL GENERAL MEETING.

DATE : Saturday,January 4th. 1969.
TIME : 8 p.m. for meeting;general natter
: 7 p.m. onwards.
PLACE : Shaftsbury Hotel,Monmouth Street,W.C.2.
Nearest tube station is Leicester Square

.....

Please complete and return.

I will be coming to the meeting on Jan 4th.

.....

I would like to renew my membership of the Assoc. for a further year.

.....Enclose membership fee.

....

Members of The Polynesian Catamaran Association.

I. A.F.Adams,The Villa ,Regent Terrace,North Shields,Northumberland.
2. D.Atkinson.I49,Rivings Hill Chesham,Bucks.
3. Sq. Ldr. A C Amos,22,Allard Cresc,Bushy Heath Herts.
4. J.P.Aubrey,Le Bambois,70,Aillevilliers,France.
5. P.Bugler,5,Rutland St,Picton, NEW ZEALAND.
6. D.H.Boon,Pretoriousplein I8,III,Amsterdam HOLLAND.
7. J.Bowden,22,Old Green Rd,St. Peter's Broadstairs,Kent.
8. A.Brown,II4,Steers Mead,Mitcham Surrey.
9. J.Brockenshire,7,Merafield Rd,Plymton Plymouth.
I0. D.Buck,The Lantern House,Bundy's Way Chertsey Lane ,Staines,Middx.
II. A.Brook ,Millcombe Farm.Blackawton Totnes. S.Devon.
I2. R.Berry,3I Canterbury Rd,Nr. Harrow,Middx.
I3. P.Bonvillain,c/o,OMNIREX?.80,Boulevard St. Germain,Paris 7e, FRANCE.
I4. J.L.Berry,29,Staple Hill,Rd,Fishponds, Pristaol
I5. E.Beecham,IO,Delfby Cresc,Kirkby,Nr. Liverpool.
I6. G.Bagot,I94,Conwey Rd,Colwyn Bay,North Wales.
I7. J.Batten,2I, St Paul's St,South port Lancs.
I8. R.Bartatt,Grubards,I5a,Salterns Lane,Hayling Island.
I9. Lt,Bonner,I58,Henderson Drive,Dartford Kent.
20. C.Beeston,I3,Brookfield Rd,Ipswich,Sffk.
2I. J.D.Berg,Ruitenborgh,Weg I3,Delfsen,HOLLAND.
22. R.A.Bishop,c/oBouncers ?Wickam Bishop,Essex.
23. T.Browne,Langara,Church Rd.Malahide, Co Dublin. Ireland.
24. Cavalie,c/o PABO/WHO.P.O.BOX 37 KingstonI2. JAMAICA.
25. Maj. F.J.Cowing,
26. R.Culverhouse,8,Kendal Close,Chandlers Ford SO5 IEG, Hants
27. J.Cork ,I40,Somerset Rd, Southall Middx.
28. G.Ceriana,Italian Embassy P?O.Box 886, Port au Prince,Haiti.W.I.
29. J.cGaesar,88,Merkelpoetstraat Vilvorde, BELGIUM.
30. C.Cooper,I3 Gordon Rd,Peckham. London S.E.I5.
3I. W.Cookson,I757,N.Orange Drive,Holywood 90028. California U.S.A.
32. S.Chan 42b,Westbourne Grove,London. W.2.
33. Sq . Ldr,Copland,36,Brauncewell Rd, CranwellSleaford Lincs.
34. L.Carpenter,Agricultural Sta.Sapu,Mid The Gambia West AFRICA.
35. G.Davis,I3,West Place Gobowen ,Nr. Oswestry Salop.
36. T.Dands,Superintendant Registrars office 2I,High St,Northwich Cheshire.
37. D.G Davies,236,Springvale Rd,Kings woatle Hants.
38. A.David,6I Conyn Rd,London S.W.II.
39. D.Dutton Remnants Galore,Market Hall Market St,LLandudno

40. A.Dunbar,9 Ochill st,Alloa,SCOTLAND.
41. M.J.Douglas,4801 D .St,Sacramento,California 95819.U.S.A.
42. Maj. Edwards,39 Leegomery Rd,Wellington, Shropshire.
43. M.L.Edwards,c/o RMK/BRY (01.11.)APO San Francisco,96243. U.S. FORCES VIETNAM.
44. C.Faulkener Station Manor,Buckston Derbyshire.
45. J.Fardell,34,Laura st,Highgate hill, Brisbane AUSTRALIA.
46. D.Fenn,17,West Ave Donnington Salop.
47. Gunton,195,Kingshill ave,Northolt Middx.
48. C.Gray,169,Eccelshall rd,South,Sheffield 11 Yorkshire.
49. J.Gold,107 kirkwood ave,Merrick,New York U.S.A. 11566.
50. S.L.Gilchrist,Ferrycline,Pobruali-by-fowey, Cornwall.
51. T.Gruter (jnr),Pla J 0 2.Israelslaan,76 Arnhem,HOLLAND.
52. P.Green,5,Walmount Rd,Sherwood Nottingham
53. R.Gongripp,P.O.Box 805,Paramaribo,Surinam DUTCH GUINEA.
54. W.Gubbins,93 Harewood Rd,Isleworth Middx.
55. D.Griffiths,Delaney,Wimblehurst Rd Horsham Sussex.
56. G.Godard,12 GOOK st,Hide Cheshire,
57. W.Groves,373,Eastwood Rd,Raleigh,Essex.
58. M.Graham,Peterhouse Marandella,RHODESIA.
59. I.Gibbon Fairway,Bell lane,Scooters Way, Berhamstead Herts.
60. N.Harford,KOTCHICK Wolverstone Marina, Wolverstone Ipswich.
61. D.Harveson,Four Seasons,Puckington,Newton-Abbot Devon.
62. C.Howse,Bayford,coombe lane,widemouth bay, Bude Cornwall.
63. J.Holmes,124,Malingsburry rd,Southampton SO1 5FQ.
64. K.Halpin,49 Earl st,Doonside,2767,Sidney N.S.W. AUSTRALIA.
65. R.Harrison,45,Liss Rd,Southsea Hants.
66. Highden Smith,10 Melinda st,Southport Queensland,AUSTRALIA
67. B.C.Hayes,57,Ferndown rd Slihull,Warwicks.
68. H .Heupers Hollard Straat,192,Amersfort HOLLAND.
69. R.Jackson,13 Windermere rd,Elsmere port Wirral Cheshire.
70. E.Jones,329,Underwood lane Crew,Cheshire.
71. B. ensen. ,Hundie Strandvej,135,Grevestrand DENMARK.
72. J.Jordin,364 Chester Rd,Hartford,Northwich Cheshire.
73. E.C.James Whiteleaf,Thundridge Ware,Herts.
74. C.Johnson,
75. E.Koh,Singacraft,Jalan,Chankek,SINGAPORE 13.
76. M.Kemp,The Millhouse,Littlebourne,Canterbury Kent.
77. P.Kings,41.Harness Rd ,Gravesend Kent.
78. R.Kirby,The Haven Nursery,Woburn Sands Bletchley Bucks.

79. A.Leach The Lidge,Acle Bridge,Norfolk.
80. G.Little 79,Chatsworth Rd,Stratford. E.I5.
8I. J.Leach, I04,Montgomery rd Ipswich Suffolk.
82. D.Lewis,The House,Cottingham ave Horsham Sussex.
83. R.Lintott,I5 School Rd,Camelsdale Haselmere. Sussex.
84. M.Lowe,St Davids School LLandudno.
85. R Larking,M.V.British Renown,c/o,B.P. Tanker Co. Ltd Britannic House, More Lane,London. E.C.2
86. L.Hill.8.Maidstone Ave,Chalton-cum-Harvey. Manchester 2I.
87. W.Lavery,I5I9,Monroe Ave,San Diego, California 92II6,U.S.A.
88. B.Lacock Eagles,East Rd,West Mersey Colchester.
89. S.Long I9,Jarret st,Cappsie,N.S.W. 2I94. AUSTRALIA.
90. D.Montgomery,83,Greystone ave,Burnsied, Rutherglen,Lanarckshire.
9I. D.Mackay,IO,Forestone rd,London N.8.
92. D.Mcglinchy,cilgwyn, Arms,LLandissum, Cards,Wales.
93. J.Moore,6 Dartmouth st,Stafford,
94. N.Mowl,5 ravenscroft,driveDroitwich Worcs.
95. Mac Sutherland,Atlantic College LLantuit Major,Glamorgan.
I00. D.Morton,I42,Fairholme Cresc,Hayes,Middx.
I0I. G.Masland,T.V.Centre,American Samoa,96920 AMERICAN SAMOA.
I02. H. Meinhardt,20 Buckly Drive,Calverton,Notts.
I03. C.MCGrory,Dept II07. I00 Rosebury Rd, Toronto,CANADA.
I04. B.Macrae Smith,I2 Manley Ave SINGAPORE IO.
I05. E.Mall,K.Brasch & Co. ltd.New Kokusai Bdg, Room No 80I,3,3,Chome,Maninouchi CHiyode - ku Tokyo,JAPAN.
Io6. P.Mcgrath,Canadian Multihull Services, Services Suite,706 43Thorncliffe Toronto I7,Ontario Canada.
I07. Maj.Morgan,3 Old Coach
I08. D. Marshall,33,East field Close,Emsworth Hants.
I09. R.MooreII,Robble Ave,Rainhill Liverpool.
IIO. Alberto Nasce,Via Concordia NIO. Bologna ITaly.
III. W.Pawley, 80, Pen Hill Road, Bexley, Kent.
II2. K. Paterson, Royal Oak Chambers, Village Road, H.R. Bebington, Cheshier.
II3. C. Pleace, P.O. Mwadui, Shimyanoa Region TANZANIA.
II4. M. Powell, 660, Manchester Road, Milnesbridge, Huddersfield, Yorks.
II5. R. Pearce, I67, Albert Road, Stechford, Birmingham 33.
II6. J. Price, Casilla 2492, Lima, Peru, SOUTH AMERICA.
II7. C. Peterson, Nodre Boulevard,23 Varde, DENMARK.
II8. B. Parkinson, Little Tarn Brick, Blackpool Rd. Kirkham.
II9. D. Penny, 224, Relpham Rd., Hellesdon, Norwich.
I20. J. Porter, c/o Nelley Bay P.O. Magnetic Island, Queensland 48TO
I22

I2I. D.Palmer, 8, Cambridge Rd, Anerley, S.E.20.
I22. C.Pedianni 2, Sunbury Ave, Clarkston Glasgow,
I23. Seret, c/o Holtman, Juliana Von Stolberglaan, I6, Versloten, HOLLAND.
I24, R.Sheridan, I053, Balsam st, White Rock B.C. CANADA.
I25. A.Sills, Redhouse Farm, Saxtead, Woodbridge, Suffk.
I26. A.Stanier, Liskerret, Fordor, Saltash Cornwall.
I27. J.Sutton, Greenways, Copthorn LaneFewley S'ton.
I28. C.Stratam. Toppins, 26, Fay Rd, Horsham Sussex.
I29. P.Steward, 3, Burke Rd, Ipswich Suffolk.
I30. P. Shreve, 8 Sandringham.57 Olivia rd, Berea Johannesburg S.AFRICA.
I3I. J.Stott, I67, Liverpool rd, Pewfall, Haydock, St Helen's Lancs.
I32. D.Stuck, Astra house Bancroft Lane, Lythbridge Staffs.
I34. J. Smits, P/a De Vrye School, waalsdorperweg. I2 The Hague HOLLAND.
I35. R.Sleep, II, Tredderwen Rd, Hackney, LondonE.8.
I36. P.Sheard, I Madera Villas, Exmouth Devon.
I37. A.Rosenbergs, 854, Batory Ave, Bay ridges, Pickering Ontario CANADA.
I38. L.Rose, 24 Frobishow Ave, Caringhow, 2229 N.S.W. AUSTRALIA.
I39. L.Russel, II Alderney rd, Slade green, Erith Kent.
I40. N.Reed, 24, tilling house, nunhead cresc, Peckham S.E.I5.
I4I. J.Thompson, 27, Main st, old Humberstone.
D42. D.Terry, Madison rd, Durham, Connecticut, 06422. U.S.A.
I43. M.Toms, North Milcombe Farm, Blackawton, Totnes, S, Devon.
I44. E.Tross, Via R, Strassi, 53, tombe di Merone Rome ITALY.
I45. T.Thomas, DR/I04 Cullham Lab, Abingdon Berks.
I46. K.Wates,
I47. P.Wrestler, 408, Nell Gwyn House, Sloane Ave London S.W.3.
I48. D.Winney, Orchard Cottage, Hurst Rd, Horsham Sussex.
I49. D.Ward, IIa, Brook St. Wordsley, Stourbridge Worcs.
I50. B.Whitaker, P.O.Box 726, Broken Hill ZAMBIA
I5I. P.Weir, Steps, Quay st, Lymington Hants.
I52. P.Watson, 44.Brauncewell rd, Cranwell, Sleaford Lincs.
I53. M. Wright, Enderley, Main rd, Goostrey Cheshire.
I54. A.Wright, I6 Kenyon Ave, Penketh, Warrington Lancs.
I56. J.Wilkie, P.O.Box III, N. Kingstown, R.I. 02852 U.S.A.
I57. R.Yates, II5, Raleaigh Rd, Hutton, Essex.
I58. A.Knightsbridge, 24, Algin Close, Hythe Hants.
I59. D.Eury, Sarnia Marine, 3, La Clloture, L'Ancresse Vale, Guernsey Channel IS.
I60. P.Garnham, David of Gordanstone School, Perth Rd, Dundee, Scotland.
I6I. H.Goddard, 4880 Queenmary Rd, Apt I2a, Montreal Quebec CANADA.
I62. J.B.Jutting, G.V.Ijielstein str 85. Amsterdam HOLLAND.
I63. J.Cortsen, Olf. Fischers g. 47, I3II. Kopenhagen Denmark.

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